UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/644,421	08/20/2003	Peter Hans Redweik	11200	6962

26890   7590   01/22/2008

JAMES M. STOVER
TERADATA CORPORATION
2835 MIAMI VILLAGE DRIVE
MIAMISBURG, OH 45342

EXAMINER
LEMIEUX, JESSICA

ART UNIT	PAPER NUMBER
4172	

MAIL DATE	DELIVERY MODE
01/22/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *20 August 2003*.
2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-54* is/are pending in the application.
   4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) *1-17, 19-35 & 37-53* is/are rejected.
7) ☒ Claim(s) *14,16,18,32,34,36,50,52 & 54* is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a) ☐ All   b) ☐ Some * c) ☐ None of:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. _____.
    3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
   Paper No(s)/Mail Date *11/03/2003*.
4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____ .

A DETAILED ACTION

Request for Information

1.   Applicant and the assignee of this application are required under 27 CFR 1.105

to provide the following information that the examiner has determined is reasonably

necessary to the examination of this application.

The information is required to extend the domain of search for prior art.

Examiner has reviewed the claims and would like to know where, specifically, the

mathematical equation presented in claims 4, 6, 14 and 16 came from. Specifically,

Examiner requests that the Applicant provide references to textbook(s), publication(s),

etc. where the equation of claims 11-18, 29-36 and 47-54 can be found.

The fee and certification requirements of 37 CFR 1.97 are waived for those

documents submitted in reply to this requirement. This waiver extends only to those

documents within the scope of this requirement under 37 CFR 1.105 that are included in

the applicant's first complete communication responding to this requirement. Any

supplemental replies subsequent to the first communication responding to this

requirement and any information disclosures beyond the scope of this requirement

under 37 CFR 1.105 are subject to the fee and certification requirements of 37 CFR

1.97.

Claim Objections

2.   Claims 14, 16, 32, 34, 50 and 52 are objected to because of the following

informalities:

Claims 14, 16, 32, 34, 50 and 52 recite "(1+ Compounded_Rate* ((k-j+1)/12)".

However, one of ordinary skill in the art could reasonably ascertain that the claim should

be amended to simply recite "(1+ Compounded_Rate)* ((k-j+1)/12)" with respect to the

other claims.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

3.   Claims 11-18, 29-36 and 47-54 are rejected under 35 U.S.C. 112, second

paragraph, as being indefinite for failing to particularly point out and distinctly claim the

subject matter which applicant regards as the invention.

Claims 11-18, 29-36 and 47-54 recite the limitation "attrition rate" in line 1. There

is insufficient antecedent basis for this limitation in the claim as well as in the

independent claim from which these claims respectively depend.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public
> use or on sale in this country, more than one year prior to the date of application for patent in the United
> States.

4.   Claims 1, 3-5, 7, 19, 21-23, 25, 37, 39-41 and 43 are rejected under 35

U.S.C. 102(b) as being anticipated by US Patent Number 7,082,411 to Johnson et al

(hereinafter Johnson).

As per claims 1, 19 and 37

Johnson discloses selecting accounts, amounts and rates (asset data) from account data stored in a database using selection criteria specified by one or more rules (column 4, lines 10-19) and performing one or more Future Value (FV) (C_1, expected payoff) calculations on the selected accounts by applying one or more FV attrition rules (discount factor) to the selected accounts using the selected amounts and rates, wherein the FV calculations determine a present value of an expected profitability value (score) of additional products that may be purchased (column 9, lines 3-26 & 58-60).

Examiner notes that applicant's specification conceptually defines attrition rates as "the rate at which a cash flow will be decreased" (page 8, lines 25-26). Johnson teaches a discount factor. One skilled in the art at the time the invention was made would understand that a discount factor is a rate used to discount or decrease future cash flow to obtain a net present value. Examiner further notes that the equation in the reference is a Future Value equation solving for Net Present Value (NPV). It would have been obvious to one skilled in the art at the time the invention was made that this equation could easily be manipulated to solve for Future Value or any of the other variables in the equation.

As per claims 3, 21 and 39

Johnson discloses the FV (C_1) is a possible future profitability value (expected payoff) (column 9, lines 3-10).

As per claims 4, 22 and 40

Johnson discloses the selected accounts contain current profitability values (current appraisal amount) (column 18, lines 8-20). Examiner notes that C_0 is the investment at time 0 and therefore it would have been obvious to one skilled in the art at the time the invention was made that a current profitability value would be the value at the present time, time 0.

As per claims 5, 23 and 41

Johnson discloses the current profitability data is aggregated to provide an initial amount for the FV calculations (C_1) (column 9, lines 6-10).

As per claims 7, 25 and 43

Johnson discloses the selected rates are FV attrition rates (discount factor) (column 9, lines 3-10).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

the prior art are such that the subject matter as a whole would have been obvious at the time the
invention was made to a person having ordinary skill in the art to which said subject matter pertains.
Patentability shall not be negatived by the manner in which the invention was made.

5.   Claims 2, 10, 20, 28, 38 and 46 are rejected under 35 U.S.C. 103(a) as being

unpatentable over US Patent Number 7,082,411 to Johnson et al (hereinafter Johnson)

in view of US Patent Number 5,812,988 to Sandretto (hereinafter Sandretto).

As per claims 2, 20 and 38
Johnson does not specifically teach applying propensity rules to the selected
accounts and applying the attrition rules to results of the propensity rules.
Sandretto teaches applying propensity rules to the selected accounts and
applying the attrition rules to results of the propensity rules (column 8, line 60- column 9,
line 19).
Therefore it would have been obvious to one skilled in the art at the time the
invention was made to apply propensity rules to the selected accounts and applying the
attrition rules to results of the propensity rules as taught by Sandretto to account for
both the increases and decreases of value needed to more accurately estimate future
value. Examiner further notes that propensity is the probability that something is likely
to happen, a risk measure. Therefore, it would have also been obvious to one skilled in
the art at the time the invention was made that propensity rules are rules that measure
and determine risk.

As per claims 10, 28 and 46
Johnson discloses matching the FV attrition rule to the selected accounts
(column 4, lines 10-15 and column 9, lines 3-11) and calculating a FV expected value
from the effective attrition rate (column 9, lines 3-11). Examiner further notes that the
equation in the reference is a Future Value equation solving for Net Present Value
(NPV). It would have been obvious to one skilled in the art at the time the invention was
made that this equation could easily be manipulated to solve for Future Value or any of
the other variables in the equation. Examiner further notes that Johnson further
discloses assessing asset and respective data using an iterative and adaptive process
(column 4, lines 10-13).
Johnson does not specifically teach matching results of a FV propensity rule to
the matched accounts, obtaining an attrition rate for the matched accounts, calculating
an effective attrition rate for each forecast period from the attrition rate and a net change
rate defined in the FV attrition rule for each forecast period, performing the FV attrition
rule to calculate an FV expected value from the effective attrition rate and a propensity
rule amount defined in the FV attrition rule and storing the FV amount.
Sandretto teaches matching results of a FV propensity rule to the matched
accounts (column 8, lines 65-67), obtaining an attrition rate for the matched accounts
(column 9, lines 2-7), calculating an effective attrition rate (column 9, lines 2-9) for each
forecast period (column 10, lines 1-7) from the attrition rate (column 9, lines 2-9) and a

net change rate (column 17, lines 18-42) defined in the FV attrition rule for each forecast period (column 10, lines 1-7), performing the FV attrition rule (column 9, lines 2-9) and a propensity rule amount defined in the FV attrition rule (column 8, line 60-column 9, line 19) and storing the FV amount (column 23, lines 25-26 and 60-61) and column 24, lines 17-23). Examiner notes that the reference teaches both storing projected returns as well as storing Net Present Value, the components of Future Value. It would have been obvious to one skilled in the art at the time the invention was made that storing of the components of Future Value could be used to easily determine the FV amount as FV is merely a calculation of the NPV in addition to returns.

Therefore it would have been obvious to one skilled in the art at the time the invention was made to incorporate the process of matching results of a FV propensity rule to the matched accounts, obtaining an attrition rate for the matched accounts, calculating an effective attrition rate for each forecast period from the attrition rate and a net change rate defined in the FV attrition rule for each forecast period, performing the FV attrition rule to calculate an FV expected value from the effective attrition rate and a propensity rule amount defined in the FV attrition rule and storing the FV amount as taught by Sandretto to account for both the increases and decreases of value needed to more accurately estimate future value based upon the iterative and adaptive process disclosed by Johnson. Examiner further notes that propensity is the probability that something is likely to happen, a risk measure. Therefore, it would have also been obvious to one skilled in the art at the time the invention was made that propensity rules are rules that measure and determine risk.

6.   Claims 6, 24 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable

over US Patent Number 7,082,411 to Johnson et al (hereinafter Johnson) in view of US

Patent Number 5,852,811 to Atkins (hereinafter Atkins).

As per claims 6, 24 and 42
Johnson does not specifically teach the selected amounts are forecast amounts.
Atkins discloses the selected amounts are forecast amounts (projected future value of the asset) (column 25, lines 39-45 & 59-65).
Therefore it would have been obvious to one skilled in the art at the time the invention was made that the selected amounts are forecast amounts as taught by Atkins as a type of selected amount found in the database to select in order to determine values and rates regarding the asset utilizing the time value money equations.

7.   Claims 8-9, 11-17, 26-27, 29-35, 44-45 and 47-53 rejected under 35 U.S.C.

103(a) as being unpatentable over US Patent Number 7,082,411 to Johnson et al

(hereinafter Johnson) in view of the Fundamentals of Financial Management by

Kuhlemeyer (hereinafter Kuhlemeyer).

As per claims 8, 26 and 44
Johnson does not specifically teach a user specifies one or more forecast periods over which the FV calculations are performed.
Kuhlemeyer teaches a user specifies one or more forecast periods over which the FV calculations are performed (slides 5, 10 and 11).
Therefore it would have been obvious to one skilled in the art at the time the invention was made to permit a user to specify one or more forecast periods over which the FV calculations are performed as taught by Kuhlemeyer to allow comparisons of future values at different time periods. It is required to recognize a range of situations including the worst case in order to make a business judgment considering a measure for risk management.

As per claims 9, 27 and 45
Johnson does not specifically teach a user specifies one or more rates for the forecast periods.
Kuhlemeyer teaches a user specifies one or more rates for the forecast periods (slides 5, 10 and 11).
Therefore it would have been obvious to one skilled in the art at the time the invention was made to permit a user to specify one or more rates for the forecast periods as taught by Kuhlemeyer to allow comparisons of future values at different time periods using specific rates. It is required to recognize a range of situations including the worst case in order to make a business judgment considering a measure for risk management.

As per claims 11, 29 and 47
Johnson discloses calculating the time value of money (column 12, lines 34-36).
Johnson does not specifically teach the FV attrition rate comprises a Constant (no compounding) method according to:
$Amount_i = Amount_o * (1 + R_o) * ((k-j + 1)/12)$ where $Amount_i$ is the calculated amount by forecast period, $Amount_o$ is the initial amount, R_o is the initial rate, i is the forecast period, j is the first month in a forecast period, and k is the last month in a forecast period.
Kuhlemeyer teaches teach the FV attrition rate comprises a Constant (no compounding) method according to:
$Amount_i = Amount_o * (1 + R_o) * ((k-j + 1)/12)$ where $Amount_i$ is the calculated amount by forecast period (FV), $Amount_o$ is the initial amount (PV), R_o is the initial rate (i), i is the forecast period (n), j is the first month in a forecast period, and k is the last month in a forecast period (slides 6, 8, & 11). Examiner notes that although Kuhlemeyer does not specifically teach $((k-j + 1)/12)$ it uses a forecast period measured by years and it would have been obvious to one skilled in the art at the time the

invention was made to use $((k-j +1)/12)$ to denote a proportion of a year to enable use of the same equation for shorter periods of time.

Therefore it would have been obvious to one skilled in the art at the time the invention was made to incorporate the FV attrition rate comprises a Constant (no compounding) method according to:

$Amount_i = Amount_o * (1 + R_o) * ((k-j + 1)/12)$ where $Amount_i$ is the calculated amount by forecast period, $Amount_o$ is the initial amount, R_o is the initial rate, i is the forecast period, j is the first month in a forecast period, and k is the last month in a forecast period as a specific time value of money equation as taught by Kuhlemeyer to allow for a calculation of the future value of present money without compounding.

As per claims 12, 30 and 48
Johnson discloses calculating the time value of money (column 12, lines 34-36).

Johnson does not specifically teach the FV attrition rate comprises a Constant (with compounding) method according to:

$Amount_i = Amount_o * (1 + R_m)^i * ((k - j + 1) / 12)$ where $Amount_i$ is the calculated amount by forecast period, $Amount_o$ is the initial amount, R_m is the monthly rate, i is the forecast period, j is the first month in a forecast period, and k is the last month in a forecast period.

Kuhlemeyer teaches the FV attrition rate comprises a Constant (with compounding) method according to:

$Amount_i = Amount_o * (1 + R_m)^i * ((k - j + 1) / 12)$ where $Amount_i$ is the calculated amount by forecast period (FV), $Amount_o$ is the initial amount (PV), R_m is the monthly rate (i), i is the forecast period (n), j is the first month in a forecast period, and k is the last month in a forecast period (slides 8, 11 & 24). Examiner notes that although Kuhlemeyer does not specifically teach $((k-j +1)/12)$ it uses a forecast period measured by years and it would have been obvious to one skilled in the art at the time the invention was made to use $((k-j +1)/12)$ to denote a proportion of a year to enable use of the same equation for shorter periods of time.

Therefore it would have been obvious to one skilled in the art at the time the invention was made to incorporate the FV attrition rate comprises a Constant (with compounding) method according to:

$Amount_i = Amount_o * (1 + R_m)^i * ((k - j + 1) / 12)$ where $Amount_i$ is the calculated amount by forecast period, $Amount_o$ is the initial amount, R_m is the monthly rate, i is the forecast period, j is the first month in a forecast period, and k is the last month in a forecast period as a specific time value of money equation as taught by Kuhlemeyer to allow for a calculation of the future value of present money with compounding.

As per claims 13, 31 and 49
Johnson discloses calculating the time value of money (column 12, lines 34-36).

Johnson does not specifically teach the FV attrition rate comprises an Additive (no compounding) method according to:

$Amount_i = Amount_o * (1 + i * (R_o / 12)) * ((k - j + 1) / 12)$ where $Amount_i$ is the calculated amount by forecast period, $Amount_o$ is the initial amount, R_o is the initial rate,

i is the forecast period, j is the first month in a forecast period, and k is the last month in a forecast period.

Kuhlemeyer teaches the FV attrition rate comprises an Additive (no compounding) method according to:

$Amount_i = Amount_o * (1 + i * (R_o / 12)) * ((k - j + 1) / 12)$ where $Amount_i$ is the calculated amount by forecast period (FV), $Amount_o$ is the initial amount (PV), R_o is the initial rate (i), i is the forecast period (n), j is the first month in a forecast period, and k is the last month in a forecast period (slides 8, 11 & 24). Examiner notes that $(i * (R_o / 12))$ can be rearranged to its equivalent $(R_o *(i / 12))$. Therefore, although Kuhlemeyer does not specifically teach (i/12) it uses a forecast period measured by years and it would have been obvious to one skilled in the art at the time the invention was made to use (i/12) to denote a rate proportionate to the duration of time year to enable use of the same equation for shorter periods of time. Examiner further notes that although Kuhlemeyer does not specifically teach ((k-j +1)/12) it uses a forecast period measured by years and it would have been obvious to one skilled in the art at the time the invention was made to use ((k-j +1)/12) to denote a proportion of a year to enable use of the same equation for shorter periods of time.

Therefore it would have been obvious to one skilled in the art at the time the invention was made to incorporate the FV attrition rate comprises an Additive (no compounding) method according to:

$Amount_i = Amount_o * (1 + i * (R_o / 12)) * ((k - j + 1) / 12)$ where $Amount_i$ is the calculated amount by forecast period, $Amount_o$ is the initial amount, R_o is the initial rate, i is the forecast period, j is the first month in a forecast period, and k is the last month in a forecast period as a specific value of money equation as taught by Kuhlemeyer to allow for an additive calculation of the future value of present money without compounding.

As per claims 14, 32 and 50

Johnson discloses calculating the time value of money (column 12, lines 34-36).

Johnson does not specifically teach the FV attrition rate comprises an Additive (with compounding) method according to:

$Amount_i = Amount_o * (1 + Compounded\_Rate) * ((k-j + 1)/12)$ where $Amount_i$ is the calculated amount by forecast period (FV), $Amount_o$ is the initial amount (PV), i is the forecast period (n), j is the first month in a forecast period, k is the last month in a forecast period, and $Compounded\_Rate$ is $Rate_1 * Rate_2 * ... * Rate_i$ (i).

Kuhlemeyer teaches the FV attrition rate comprises an Additive (with compounding) method according to:

$Amount_i = Amount_o * (1 + Compounded\_Rate) * ((k-j + 1)/12)$ where $Amount_i$ is the calculated amount by forecast period (FV), $Amount_o$ is the initial amount (PV), i is the forecast period, j is the first month in a forecast period, k is the last month in a forecast period, and $Compounded\_Rate$ is $Rate_1 * Rate_2 * ... * Rate_i$ (slides 8, 11 & 24). Examiner notes that a compounded rate to one skilled in the art at the time the invention was made would be found by $(1+Rate_1)*(1+Rate_2)*...*(Rate_j)$, whereby when the rates are equivalent would be the equivalent of $(1+Rate)^j$ which the reference clearly shows in

slides 8 and 11. However, as written examiner notes that Compounded_Rate is $Rate_1$ * $Rate_2$ * ... * $Rate_i$ whereby when the rates are equivalent could be rewritten as $Rate^j$. $Rate^j$ is in essence another value or rate that the reference teaches in slides 8 and 11. Examiner further notes that although Kuhlemeyer does not specifically teach ((k-j +1)/12) it uses a forecast period measured by years and it would have been obvious to one skilled in the art at the time the invention was made to use ((k-j +1)/12) to denote a proportion of a year to enable use of the same equation for shorter periods of time.

Therefore it would have been obvious to one skilled in the art at the time the invention was made to incorporate the FV attrition rate comprises an Additive (with compounding) method according to:

$Amount_i$ = $Amount_o$ * (1 + Compounded_Rate) * ((k-j + 1)/12) where $Amount_i$ is the calculated amount by forecast period (FV), $Amount_o$ is the initial amount (PV), i is the forecast period (n), j is the first month in a forecast period, k is the last month in a forecast period, and Compounded_Rate is $Rate_1$ * $Rate_2$ * ... * $Rate_i$ (i) as taught by Kuhlemeyer to allow for an additive calculation of the future value of present money with compounding.

As per claims 15, 33 and 51

Johnson discloses calculating the time value of money (column 12, lines 34-36).

Johnson does not specifically teach the FV attrition rate comprises a Manual (no compounding) method according to:

$Amount_i$ = $Amount_0$ * (1 + R_{man}) * ((k -j + 1) / 12) where $Amount_i$ is the calculated amount by forecast period, $Amount_o$ is the initial amount, R_{man} is the manual rate, i is the forecast period, j is the first month in a forecast period, and k is the last month in a forecast period.

Kuhlemeyer teaches the FV attrition rate comprises a Manual (no compounding) method according to:

$Amount_i$ = $Amount_0$ * (1 + R_{man}) * ((k -j + 1) / 12) where $Amount_i$ is the calculated amount by forecast period (FV), $Amount_o$ is the initial amount (PV), R_{man} is the manual rate (i), i is the forecast period (n), j is the first month in a forecast period, and k is the last month in a forecast period (slides 8, 11 & 24). Examiner notes that although Kuhlemeyer does not specifically teach ((k-j +1)/12) it uses a forecast period measured by years and it would have been obvious to one skilled in the art at the time the invention was made to use ((k-j +1)/12) to denote a proportion of a year to enable use of the same equation for shorter periods of time.

Therefore it would have been obvious to one skilled in the art at the time the invention was made to incorporate the FV attrition rate comprises a Constant (with compounding) method according to:

$Amount_i$ = $Amount_0$ * $(1 + R_m)^i$ * ((k -j + 1) / 12) where $Amount_i$ is the calculated amount by forecast period, $Amount_o$ is the initial amount, R_m is the monthly rate, i is the forecast period, j is the first month in a forecast period, and k is the last month in a forecast period as a specific time value of money equation as taught by Kuhlemeyer to allow for a manual calculation of the future value of present money without compounding.

As per claims 16, 34 and 52

Johnson discloses calculating the time value of money (column 12, lines 34-36).

Johnson does not specifically teach the FV attrition rate comprises a Manual (with compounding) method according to:

$Amount_i = Amount_o * (1 + Compounded\_Rate) * ((k - j + 1) / 12)$ where $Amount_i$ is the calculated amount by forecast period, $Amount_o$ is the initial amount, i is the forecast period, j is the first month in a forecast period, k is the last month in a forecast period, and Compounded_Rate is $Rate_1 * Rate_2 * ... * Rate_i$.

Kuhlemeyer teaches the FV attrition rate comprises a Manual (with compounding) method according to:

$Amount_i = Amount_o * (1 + Compounded\_Rate) * ((k - j + 1)/12)$ where $Amount_i$ is the calculated amount by forecast period (FV), $Amount_o$ is the initial amount (PV), i is the forecast period, j is the first month in a forecast period, k is the last month in a forecast period, and Compounded_Rate is $Rate_1 * Rate_2 * ... * Rate_i$ (slides 8, 11 & 24). Examiner notes that a compounded rate to one skilled in the art at the time the invention was made would be found by $(1+Rate_1)*(1+Rate_2)*...*(Rate_j)$, whereby when the rates are equivalent would be the equivalent of $(1+Rate)^j$ which the reference clearly shows in slides 8 and 11. However, as written examiner notes that Compounded_Rate is $Rate_1 * Rate_2 * ... * Rate_i$ whereby when the rates are equivalent could be rewritten as $Rate^j$. $Rate^j$ is in essence another value or rate that the reference teaches in slides 8 and 11. Examiner further notes that although Kuhlemeyer does not specifically teach $((k-j +1)/12)$ it uses a forecast period measured by years and it would have been obvious to one skilled in the art at the time the invention was made to use $((k-j +1)/12)$ to denote a proportion of a year to enable use of the same equation for shorter periods of time.

Therefore it would have been obvious to one skilled in the art at the time the invention was made to incorporate the FV attrition rate comprises a Manual (with compounding) method according to:

$Amount_i = Amount_o * (1 + Compounded\_Rate) * ((k-j + 1)/12)$ where $Amount_i$ is the calculated amount by forecast period (FV), $Amount_o$ is the initial amount (PV), i is the forecast period (n), j is the first month in a forecast period, k is the last month in a forecast period, and Compounded_Rate is $Rate_1 * Rate_2 * ... * Rate_i$ (i) as taught by Kuhlemeyer to allow for an additive calculation of the future value of present money with compounding.

As per claims 17, 35 and 53

Johnson discloses calculating the time value of money (column 12, lines 34-36).

Johnson does not specifically teach the FV attrition rate comprises a Constant method according to:

$Amount_i = Amount_o$ where $Amount_i$ is the calculated amount by forecast period, $Amount_o$ is the initial amount, and i is the forecast period.

Kuhlemeyer teaches the FV attrition rate comprises a Constant method according to:

Amount$_i$ = Amount$_o$ where Amount$_i$ is the calculated amount by forecast period (FV), Amount$_o$ is the initial amount (PV), and i is the forecast period (n) (slide 3).

Therefore it would have been obvious to one skilled in the art at the time the invention was made to incorporate the FV attrition rate comprises a Constant method according to:

Amount$_i$ = Amount$_o$ where Amount$_i$ is the calculated amount by forecast period, Amount$_o$ is the initial amount, and i is the forecast period as taught by Kuhlemeyer to allow for a constant calculation of the future value of present money.

Allowable Subject Matter

Claims 18, 36 and 54 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims pending results of 27 CFR 1.105.

Conclusion

8.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patent Number 6,901,406 to Nabe et al. discloses models used to determine profitability analysis, and probability scores in relation to response, attrition and risk. US Patent Number 7,249,138 to Wasserman discloses performing financial processing by selecting accounts from a database and performing profitability calculations on the accounts selected from the database. US Patent Application Number US2002/0174049 to Kitahara discloses an analysis processor of profit models. WIPO Publication Number WO03/067395 to Breeden et al. discloses a modeling engine to determine forecasts from a portfolio database.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jessica L. Lemieux whose telephone number is 571-270-3445. The examiner can normally be reached on Monday-Thursday 8AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Tom Dixon can be reached on 571-272-6803. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/THOMAS A DIXON/   Jessica L Lemieux
Supervisory Patent Examiner, Art Unit 4172   Examiner
                                                           Art Unit 4172
January 2008